

AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF THE CLAIMS:

1-5. (Canceled).

6. (Currently Amended) A method for providing digital data transmission of sensor values from a sensor to a control unit, the sensor values generated from characteristics measured by the sensor, the method comprising:

dividing the sensor values ~~of the sensor~~ for data transmission at different resolutions, the sensor values forming a first range of values including successive sensor values; and

dividing the first range of values as a function of a variable relevant for the control unit.

7. (Currently Amended) The method as recited in Claim 6, wherein~~[[:]]~~ the variable is a second range of sensor values for threshold values of a triggering algorithm for a restraining device, and wherein the sensor values in the second range of values are transmitted from the sensor to the control unit at a higher resolution.

8. (Previously Presented) The method as recited in Claim 7, wherein the second range of values is selected from a lower half of the first range of values.

9. (Previously Presented) The method as recited in Claim 6, wherein the method is executed by a transmitter module in the sensor.

10. (Previously Presented) The method as recited in Claim 6, wherein the method is executed by a receiver module in a control unit.

11. (Currently Amended) The method as recited in Claim 6, wherein~~[[:]]~~ the variable is a second range of sensor values for threshold values of a triggering algorithm for a restraining device, wherein the sensor values in the second range of values are transmitted from the sensor to the control unit at a higher resolution, wherein the second range of values is selected from a lower half of the first range of values, and wherein the operations are

executed by a transmitter module in the sensor.

12. (Currently Amended) The method as recited in Claim 6, wherein the variable is a second range of sensor values for threshold values of a triggering algorithm for a restraining device, wherein the sensor values in the second range of values are transmitted from the sensor to the control unit at a higher resolution, wherein the second range of values is selected from a lower half of the first range of values, and wherein the operations are executed by a receiver module in a control unit.

13. (New) The method as recited in Claim 7, wherein the first range of values and the second range of values are successive.

14. (New) The method as recited in Claim 7, wherein a range of values which is transmitted at a higher resolution is in a lower half of a total range of the sensor values.

15. (New) The method as recited in Claim 7, wherein a first half having lower values is distributed on a majority of possible transmission values, and a second half having higher values is linearly distributed on a remainder of the possible transmission values, so that the lower values are transmitted at a higher bit resolution and the higher values are transmitted at a lower bit resolution.

16. (New) A method for providing digital data transmission of sensor values from a sensor to a control unit, the sensor values being generated from characteristics measured by the sensor, the method comprising:

dividing the sensor values for data transmission at different resolutions, the sensor values forming a first range of values including successive sensor values; and

dividing the first range of values as a function of a variable relevant for the control unit, wherein the variable is a second range of sensor values for threshold values of a triggering algorithm for a restraining device;

wherein the first range of values and the second range of values are successive, wherein a first half having lower values is distributed on a majority of possible transmission values, and wherein a second half having higher values is linearly distributed on a remainder

of the possible transmission values, so that the lower values are transmitted at a higher bit resolution and the higher values are transmitted at a lower bit resolution.

17. (New) The method as recited in Claim 16, wherein a transmitter module executes the division of the sensor values as a function of the variable relevant for the control unit, wherein the variable includes the threshold values for a triggering algorithm, wherein the transmitter module selects the range of values, in which the threshold values may appear, for transmission at a higher resolution, while it transmits an outlying range of values at a lower resolution, and wherein the transmitted sensor values are received by the control unit via a receiver module and are supplied to a processor for processing by the triggering algorithm.

18. (New) The method as recited in Claim 17, wherein the control unit is for a restraining arrangement.

19. (New) The method as recited in Claim 17, wherein the control unit is for a vehicle dynamics control system.

20. (New) The method as recited in Claim 17, wherein the control unit is for a kinematic sensor system.